

Appl. No. 09/579,371
Amdt. Dated 06/17/2004
Reply to Office Action of 4/20/2004

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Remarks/Arguments

Applicants appreciate the Examiner's allowance of claims 21-23, 25 and 28-30 and the Examiner's holding that claims 4-8, 11, 12, 14, 16, 18-20, 34 and 35 would be allowable if rewritten in independent form to include all of the limitations of their respective base claims and any intervening claims. Accordingly, applicants have thus amended claims 4, 5, 6, 11, 12, 14, 16, 17, 18, 19, 20, 34, and 35, claims 7 and 8 being dependent on now independent claim 6. Reconsideration and allowance of claims 4-8, 11, 12, 14, 16, 18-20, and 34-35 are therefore respectfully requested.

Claims 1-3, 10, 13, 15, 17, 24, 26-27, 31, 33, 36 and 38-40 stand rejected, 35 USC 102, as anticipated by Beigi et al patent 6,363,056, hereinafter Beigi. In response thereto applicants are canceling claims 1-2, 10, 13, 15, 24, 26, 31, 33, and 38-40. Accordingly, the only claims now at issue are claims 3, 17, 27, and 36. Applicants are amending claims 3, 17, 27, and 36 further to distinguish from Beigi. For the reasons set forth below, applicants submit that these claims also patent ably distinguish from Beigi and are not anticipated by Beigi.

With respect to claim 3, the Examiner appears to be equating Beigi's reflected packets with applicants' "detecting duplicate packets", by reference to Beigi's disclosure at column 3, line 56 to column 4, line 14. However, applicants submit that their duplicate packets are different from and not suggested by or anticipated by the Beigi reflected packets. Duplicate packets exist in IP data networks independently of the presence or absence of any network monitors. These duplicate packets are unwittingly generated by certain IP network nodes and devices. Applicants' inventive method uniquely provides mechanisms for detecting these duplicate packets and incorporating the count of duplicate packets into accurate network measurements. In contrast, Beigi's reflected packets are probe packets actively inserted into the measured data stream (similar to response packets generated by the common network utility "ping"). These reflected packets have no relation or similarity to duplicate IP packets generated by other network nodes, nor does Beigi provide any mechanism for the detection of duplicate packets. This distinction between applicants' invention and the Beigi disclosure is also due to applicants' reliance on a passive measurement mechanism, rather than the active insertion of probe packets as described by Beigi. To clarify this distinction between applicants' duplicate packets and the Beigi reflected packets, claim 3 has been amended to recite "detecting duplicate packets generated by network nodes".

The Examiner rejected claim 17 on the same basis as claim 3. However, as discussed above with reference to claim 3, the reflected packets described in Beigi (column 3, line 56 to column 4, line 14) are not the same as or suggestive of applicants'

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use of duplicate packets. Claim 17 has been amended, similar to claim 3, to recite that the duplicate packets are generated by network nodes and are not the reflected packets of Beigi.

The Examiner in rejecting claim 27 on Beigi states that Beigi determines the time difference between the times a packet flows through a first and a second point in the network. But this broad statement is not descriptive of applicants' invention, as recited in claim 27. Beigi refers to determining a delay between two end points through the use of a common clock and probe packets (column 3, lines 24-26; see also Beigi claim 11). Applicants' invention is completely different from this teaching. Applicants determine the delay of a packet associated with a correlated package, i.e., a user data packet. There is a significant and non-obvious difference between Beigi' computing a delay for probe packets and applicants' determining "a first time at which a packet associated with a correlated package flows through the first point in the network, determining a second time at which the packet associated with the correlated package flows through the second point in the network, and subtracting the first time from the second time," as recited in claim 27, as amended.

The Examiner rejected claim 36, which has now been rewritten in independent form, on the basis that Beigi discloses packages which include a packet flow identifier, a frame number, and a package size, citing the Beigi abstract, column 8, lines 23-35, and column 8, line 65 to column 9, line 15. Applicants respectfully submit that the Beigi disclosure does not support the Examiner's position. Beigi only vaguely refers to "additional data to be used for monitoring" and specifically mentions a "probe identifier, local time stamp, and reflect field" (column 8, lines 30-34). All of this, of course, is in the content of the Beigi use of probe packets; as stated in the abstract, referred to by the Examiner "Probe packets are sent from ingress access routers where they are received and processed by egress access routers." Applicants are amending claim 36 to recite that applicants' system as recited in claim 36, involves not probe packets but user data packets. Further, Beigi's description and teaching of keeping track of how many probe packets are received is not relevant to applicants' packages corresponding to frames of user data packets, which frames include a packet flow identifier, a frame number, and a package size.

For the reasons set forth above, applicants respectfully submit that claims 3, 17, 27, and 36, as amended, are also clearly allowable, and their reconsideration and allowance are accordingly requested.

Since claims 21-23, 25, and 28-30 have been allowed, claims 4-8, 11, 12, 14, 16, 18-20, 34, and 35 have been held to be allowable, and claims 3, 17, 27, and 36 are submitted to be allowable, as discussed above, it is believed that this application is now in condition to be passed to issue, and such action is also respectfully requested.

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However, if the Examiner deems it would in any way expedite the prosecution of this application, the Examiner is invited to telephone applicants' attorney at the number set forth below.

Respectfully submitted,

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